IN THE CLAIMS

1. (currently amended) A circuit for a radar level gauge for measuring the level of the surface ~~(6)~~ of a product ~~(2)~~ stored in a container ~~(1)~~, said level gauge including a radar ~~(3)~~ for transmitting microwave signals from a multiband antenna unit ~~(5)~~ towards said surface ~~(6)~~ for receiving by said same antenna unit microwave signals reflected by said surface and for determining the level based on an evaluation of the time lapsed between the received and the transmitted signals and said radar ~~(3)~~ operating on at least two different frequency bands, wherein the circuit includes:

- first microwave provision means for providing a microwave signal of a first frequency band having a first center frequency,
- second microwave provision means for providing a microwave signal of a second frequency band having a second center frequency, wherein the ratio between the second and the first center frequency is quantified as at least greater than 1.5:1 and preferably greater than 2:1 and
- switches operated by means of a control signal for switching the circuit to operate on said first frequency band or said second frequency band.

2. (currently amended) A circuit according to claim 1, wherein the circuit further includes:

- a microwave generating source operating on a fixed frequency f_0,
- at least one frequency multiplier ~~(26, 30, 32)~~ coupled between the source and the antenna unit ~~(39, 40)~~ for the provision at the output of the frequency multiplier a multiple frequency mf_0,
- a number of first switches ~~(28, 34)~~ for the choice of an operating frequency (f_0, mf_0) to be delivered to the antenna unit ~~(39)~~,
- a number of mixers ~~(35, 37)~~ for mixing the microwave signal received from the antenna unit ~~(39, 40)~~ with the chosen operating frequency for the forming of an IF-frequency,

- a number of second switches ~~(28, 33)~~ for directing the microwave operating frequency to a mixer ~~(35, 37)~~ corresponding to the operating frequency and
- the choice of operating frequency for the circuit is made by a control signal controlling the switches ~~(28, 33, 34)~~.

3. (currently amended) The circuit according to claim 2, including:
- a chain of at least two frequency multipliers ~~(26, 30, 32)~~ coupled in series between the source and the antenna unit ~~(39, 40)~~.

4. (currently amended) The circuit according to claim 2, including:
- a chain of at least two cascade coupled frequency multipliers ~~(26, 30, 32)~~ coupled between the source and the antenna unit.

5. (currently amended) The circuit according to ~~any of~~ claim~~s~~ 3 ~~and 4~~, including:
- each one of said multiplier ~~(28, 30, 32)~~ multiplying the input microwave frequency by a predetermined constant.

6. (new) The circuit according to claim 4, including:
- each one of said multiplier multiplying the input microwave frequency by a predetermined constant.

~~6~~7. (currently amended) The circuit according to claim 2, wherein said microwave generating source includes a voltage control oscillator VCO ~~(20)~~.

~~7~~8. (currently amended) The circuit according to claim ~~6~~7, wherein said ~~said~~ microwave generating source includes a phase looked loop.

~~8~~9. (currently amended) A method for measuring the level of the surface ~~(6)~~ of a product ~~(2)~~ stored in a container ~~(1)~~ by means of

a radar level gauge, wherein said level gauge includes a radar ~~(3)~~ for transmitting microwave signals from a multiband antenna unit ~~(39, 40)~~ towards said surface ~~(6)~~ for receiving by said same antenna unit ~~(39, 40)~~ microwave signals reflected by said surface ~~(6)~~ and for determining the level based on an evaluation of the time lapsed between the received and the transmitted signals and said radar ~~(3)~~ operating on at least two different frequency bands, comprising the steps of:

- providing in a circuit a microwave signal of a first frequency band having a first center frequency
- providing in said circuit a microwave signal of a second frequency band having a second center frequency, wherein the ratio between the second and the first center frequency is quantified as at least greater than 1.5:1 and preferably greater than 2:1,
- providing said circuit with switches ~~(28, 33, 34)~~ for switching the circuit to operate on said first frequency band or said second frequency band and
- controlling said switches by means of a control signal.

~~9~~10. (currently amended) The method according to claim ~~8~~9, further comprising the step of:

- generating a microwave having a fixed frequency f_0,
- multiplying in at least one frequency multiplier ~~(26, 30, 32)~~ said fixed frequency f_0 by a factor m for obtaining a frequency mf_0 being the factor m higher than said fixed frequency,
- choosing by means of controlling a number of first switches ~~(28, 34)~~ an operating frequency (f_0, mf_0) to be delivered to the antenna unit ~~(39, 40)~~,
- directing the microwave operating frequency to a mixer ~~(35, 37)~~ corresponding to the operating frequency,
- mixing the microwave signal received from the antenna unit ~~(39, 40)~~ with the chosen operating frequency for the forming of an IF-frequency

and

- selecting an operating frequency for the circuit by means of said control signal controlling said switches ~~(28, 34)~~.

~~10~~11. (currently amended) A radar level gauge, **characterized** in that it comprises the circuit according to ~~anyone of claims~~claim 1 ~~to 7~~.